1653

1600

P#16

P.9

RAW SEQUENCE LISTING   DATE: 10/30/2002
PATENT APPLICATION: US/09/673,490B   TIME: 16:02:48

Input Set : A:\13922.txt
Output Set: N:\CRF4\10302002\I673490B.raw

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   3 <110> APPLICANT: The University of Queensland
   5 <120> TITLE OF INVENTION: Novel omega conotoxin peptides
   7 <130> FILE REFERENCE: 2338740/MJC
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/673,490B
  10 <141> CURRENT FILING DATE: 1999-04-16
  12 <150> PRIOR APPLICATION NUMBER: PCT/AU99/00288
  13 <151> PRIOR FILING DATE: 1999-04-16
  15 <160> NUMBER OF SEQ ID NOS: 44
  17 <170> SOFTWARE: PatentIn version 3.0
  19 <210> SEQ ID NO: 1
  20 <211> LENGTH: 6
  21 <212> TYPE: PRT
  22 <213> ORGANISM: conus catus
  24 <400> SEQUENCE: 1
  26 Ser Gly Thr Val Gly Arg
  27 1               5
  29 <210> SEQ ID NO: 2
  30 <211> LENGTH: 6
  31 <212> TYPE: PRT
  32 <213> ORGANISM: conus catus
  34 <400> SEQUENCE: 2
  36 Ser Lys Leu Met Tyr Asp
  37 1               5
  40 <210> SEQ ID NO: 3
  41 <211> LENGTH: 6
  42 <212> TYPE: PRT
  43 <213> ORGANISM: Artificial Sequence
  45 <220> FEATURE:
  46 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified version of the
second
  47       loop of CVID
  49 <400> SEQUENCE: 3
  51 Ser Arg Leu Met Tyr Asp
  52 1               5
  54 <210> SEQ ID NO: 4
  55 <211> LENGTH: 6
  56 <212> TYPE: PRT
  57 <213> ORGANISM: Artificial Sequence
  59 <220> FEATURE:
  60 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified version of the
second
  61       loop of CVID
  63 <400> SEQUENCE: 4
  65 Asp Arg Leu Met Tyr Asp
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ENTERED

66 1   5

10/30/02

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/673,490B**

DATE: 10/30/2002
TIME: 16:02:48

Input Set : **A:\13922.txt**
Output Set: **N:\CRF4\10302002\I673490B.raw**

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68 <210> SEQ ID NO: 5
69 <211> LENGTH: 27
70 <212> TYPE: PRT
71 <213> ORGANISM: conus catus
73 <400> SEQUENCE: 5
75 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys
76 1               5                   10                  15
79 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
80              20              25
83 <210> SEQ ID NO: 6
84 <211> LENGTH: 27
85 <212> TYPE: PRT
86 <213> ORGANISM: Artificial Sequence
88 <220> FEATURE:
89 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified form of CVID
91 <400> SEQUENCE: 6
93 Cys Lys Ser Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
94 1               5                   10                  15
96 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
97              20              25
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 27
102 <212> TYPE: PRT
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence: A modified form of CVID
108 <400> SEQUENCE: 7
110 Cys Lys Ser Lys Gly Ala Lys Cys Asp Arg Leu Met Tyr Asp Cys Cys
111 1               5                   10                  15
113 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
114              20              25
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 25
118 <212> TYPE: PRT
119 <213> ORGANISM: conus magus
121 <400> SEQUENCE: 8
123 Cys Lys Gly Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
124 1               5                   10                  15
126 Thr Gly Ser Cys Arg Ser Gly Lys Cys
127              20              25
129 <210> SEQ ID NO: 9
130 <211> LENGTH: 26
131 <212> TYPE: PRT
132 <213> ORGANISM: conus magus
134 <400> SEQUENCE: 9
136 Cys Lys Gly Lys Gly Ala Pro Cys Arg Lys Thr Met Tyr Asp Cys Cys
137 1               5                   10                  15
139 Ser Gly Ser Cys Gly Arg Arg Gly Lys Cys
140              20              25
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RAW SEQUENCE LISTING   DATE: 10/30/2002
PATENT APPLICATION: US/09/673,490B   TIME: 16:02:48

Input Set : A:\13922.txt
Output Set: N:\CRF4\10302002\I673490B.raw

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142 <210> SEQ ID NO: 10
143 <211> LENGTH: 27
144 <212> TYPE: PRT
145 <213> ORGANISM: conus geographus
147 <220> FEATURE:
148 <221> NAME/KEY: misc_feature
149 <223> OTHER INFORMATION: Pro at positions 4, 10 and 21 is 4-Hyp
151 <400> SEQUENCE: 10
153 Cys Lys Ser Pro Gly Ser Ser Cys Ser Pro Thr Ser Tyr Asn Cys Cys
154 1               5                   10                  15
156 Arg Ser Cys Asn Pro Tyr Thr Lys Arg Cys Tyr
157             20              25
160 <210> SEQ ID NO: 11
161 <211> LENGTH: 18
162 <212> TYPE: DNA
163 <213> ORGANISM: conus catus
165 <400> SEQUENCE: 11
167 agcggcaccg taggtaga                                          18
170 <210> SEQ ID NO: 12
171 <211> LENGTH: 382
172 <212> TYPE: DNA
173 <213> ORGANISM: conus catus
175 <220> FEATURE:
176 <221> NAME/KEY: CDS
177 <222> LOCATION: (10)..(228)
179 <400> SEQUENCE: 12
181 atcatcaaa atg aaa ctg acg tgt gtg gtg atc gtc gcc gtg ctg ctc ctg   51
182           Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu
183           1               5                   10
185 acg gcc tgt caa ctc atc aca gct aat gac tcc aga ggt acg cag aag      99
186 Thr Ala Cys Gln Leu Ile Thr Ala Asn Asp Ser Arg Gly Thr Gln Lys
187 15                  20                  25                  30
189 cat cgt gcc ctg agg tcg gac acc aaa ctc tcc atg tcg act cgc tgc     147
190 His Arg Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys
191             35                  40                  45
193 aag agt aaa gga gca aaa tgt tca aag ctt atg tat gac tgc tgc agc     195
194 Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys Ser
195             50                  55                  60
197 ggt tct tgc agc ggc acc gta ggt aga tgt ggc tgatccggcg cttgatctcc   248
198 Gly Ser Cys Ser Gly Thr Val Gly Arg Cys Gly
199             65                  70
201 cccttctgtg ctctatcctt ttctgcctga gtcctcctta cctgagagtg gtcatgaacc   308.
203 actcatcacc tacccctgg aggtctcaaa gaactacttg aaataaagcc gcttgcaaaa      368
205 aaaaaaaaaa aaaa                                                       382
208 <210> SEQ ID NO: 13
209 <211> LENGTH: 73
210 <212> TYPE: PRT
211 <213> ORGANISM: conus catus
213 <400> SEQUENCE: 13
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215 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
216 1           5               10              15
219 Cys Gln Leu Ile Thr Ala Asn Asp Ser Arg Gly Thr Gln Lys His Arg
220         20              25              30
223 Ala Leu Arg Ser Asp Thr Lys Leu Ser Met Ser Thr Arg Cys Lys Ser
224         35              40              45
227 Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys Ser Gly Ser
228     50              55              60
231 Cys Ser Gly Thr Val Gly Arg Cys Gly
232 65              70
235 <210> SEQ ID NO: 14
236 <211> LENGTH: 27
237 <212> TYPE: PRT
238 <213> ORGANISM: conus catus
240 <400> SEQUENCE: 14
242 Cys Arg Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys
243 1           5               10              15
245 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
246         20              25
248 <210> SEQ ID NO: 15
249 <211> LENGTH: 27
250 <212> TYPE: PRT
251 <213> ORGANISM: conus catus
253 <400> SEQUENCE: 15
255 Cys Lys Ser Lys Gly Ala Arg Cys Ser Lys Leu Met Tyr Asp Cys Cys
256 1           5               10              15
258 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
259         20              25
261 <210> SEQ ID NO: 16
262 <211> LENGTH: 27
263 <212> TYPE: PRT
264 <213> ORGANISM: conus catus
266 <400> SEQUENCE: 16
268 Cys Lys Ser Lys Gly Ala Gln Cys Ser Lys Leu Met Tyr Asp Cys Cys
269 1           5               10              15
271 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
272         20              25
274 <210> SEQ ID NO: 17
275 <211> LENGTH: 27
276 <212> TYPE: PRT
277 <213> ORGANISM: conus catus
279 <400> SEQUENCE: 17
281 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys
282 1           5               10              15
285 Ser Gly Ser Cys Ser Gly Ala Val Gly Arg Cys
286         20              25
288 <210> SEQ ID NO: 18
289 <211> LENGTH: 27
290 <212> TYPE: PRT
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RAW SEQUENCE LISTING   DATE: 10/30/2002
PATENT APPLICATION: US/09/673,490B   TIME: 16:02:48

Input Set : A:\13922.txt
Output Set: N:\CRF4\10302002\I673490B.raw

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291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID
296 <400> SEQUENCE: 18
298 Cys Lys Ser Lys Gly Ala Lys Cys Asp Lys Leu Met Tyr Asp Cys Cys
299 1               5                   10                  15
301 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
302             20                  25
304 <210> SEQ ID NO: 19
305 <211> LENGTH: 27
306 <212> TYPE: PRT
307 <213> ORGANISM: Artificial Sequence⸳
309 <220> FEATURE:
310 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID
312 <400> SEQUENCE: 19
314 Cys Lys Tyr Lys Gly Ala Lys Cys Ser Arg Leu Met Tyr Asp Cys Cys
315 1               5                   10                  15
317 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
318             20                  25
320 <210> SEQ ID NO: 20
321 <211> LENGTH: 27
322 <212> TYPE: PRT
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID
328 <400> SEQUENCE: 20
330 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Ala Tyr Asp Cys Cys
331 1               5                   10                  15
333 Ser Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
334             20                  25
336 <210> SEQ ID NO: 21
337 <211> LENGTH: 27
338 <212> TYPE: PRT
339 <213> ORGANISM: Artificial Sequence
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID
344 <400> SEQUENCE: 21
346 Cys Lys Ser Lys Gly Ala Lys Cys Ser Lys Leu Met Tyr Asp Cys Cys
347 1               5                   10                  15
349 Thr Gly Ser Cys Ser Gly Thr Val Gly Arg Cys
350             20                  25
352 <210> SEQ ID NO: 22
353 <211> LENGTH: 27
354 <212> TYPE: PRT
355 <213> ORGANISM: Artificial Sequence
357 <220> FEATURE:
358 <223> OTHER INFORMATION: Description of Artificial Sequence: A derivative of CVID
360 <220> FEATURE:
361 <221> NAME/KEY: misc_feature
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/30/2002
PATENT APPLICATION: US/09/673,490B   TIME: 16:02:49

    Input Set : A:\13922.txt
    Output Set: N:\CRF4\10302002\I673490B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:22; Xaa Pos. 5
Seq#:30; Xaa Pos. 12
Seq#:31; Xaa Pos. 12
Seq#:37; Xaa Pos. 4
Seq#:38; Xaa Pos. 4
Seq#:39; Xaa Pos. 2,3,4,6,7,9,12,14,17,22

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:33; Line(s) 567
Seq#:34; Line(s) 581
Seq#:35; Line(s) 595
Seq#:36; Line(s) 613
Seq#:37; Line(s) 631
Seq#:38; Line(s) 650